



Illinois Environmental Protection Agency
Permit Section, Division of Water Pollution Control
P.O. Box 19276
Springfield, Illinois 62794-9276

For IEPA Use:

Application for Permit or Construction Approval
WPC-PS-1

1. Owner Name: V3 Monee, LLC

Name of Project: Ironhorse

Township: Monee

County: Will

2. Brief Description of Project:

A sanitary sewer extension with a lift station and force main serving the Ironhorse subdivision.

3. Documents Being Submitted: If the Project involves any of the items listed below, submit the corresponding schedule, and check the appropriate boxes.

	Schedule		Schedule
Private Sewer Connection/Extension	A/B <input checked="" type="checkbox"/>	Spray Irrigation	H <input type="checkbox"/>
Sewer Extension Construct Only	C <input type="checkbox"/>	Septic Tanks	I <input type="checkbox"/>
Sewage Treatment Works	D <input type="checkbox"/>	Industrial Treatment/Pretreatment	J <input type="checkbox"/>
Excess Flow Treatment	E <input type="checkbox"/>	Waste Characteristics	N <input type="checkbox"/>
Lift Station/Force Main	F <input checked="" type="checkbox"/>	Erosion Control	P <input checked="" type="checkbox"/>
Fast Track Service Connection	FTP <input type="checkbox"/>	Trust Disclosure	T <input type="checkbox"/>
Sludge Disposal	G <input type="checkbox"/>		

Plans: Title Final Engineering Plans for Ironhorse - Offsite Utility Extension

No. of Pages: 11

Specifications: Title N/A

No. of Books/Pages: _____

Other Documents: _____
(Please Specify)

3.1 Illinois Historic Preservation Agency approval letter: Yes ☒ No ☐

4. Land Trust: Is the project identified in item number 1 herein, for which a permit is requested, to be constructed on land which is the subject of a trust? Yes ☐ No ☒

If yes, Schedule T (Trust Disclosure) must be completed and item number 7.1.1 must be signed by a beneficiary, trustee or trust officer.

5. This is an Application for (Check Appropriate Line):

- ☒ A. Joint Construction and Operating Permit
☐ B. Authorization to Construct (See Instructions) NPDES Permit No. IL00 _____
☐ C. Construct Only Permit (Does Not Include Operations)
☐ D. Operate Only Permit (Does Not Include Construction)

6. Certifications and Approval:

6.1 Certificate by Design Engineer (When required: refer to instructions)

I hereby certify that I am familiar with the information contained in this application, including the attached schedules indicated above, and that to the best of my knowledge and belief such information is true, complete and accurate. The plans and specifications (specifications other than Standard Specifications or local specifications on file with this Agency) as described above were prepared by me or under my direction.

Engineer Name: Dwayne Gillian

Registration Number: 062 - 048002
(3 digits) (6 digits)

Firm: V3 Companies of Illinois, Ltd.

Address: 7325 Janes Avenue

City: Woodridge

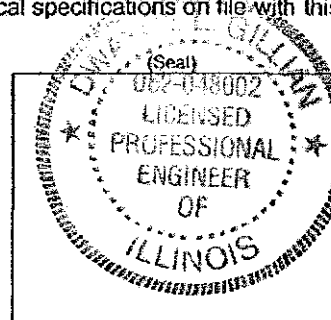
State: IL

Zip: 60517

Phone No: (630) 724-9200

Signature X Dwayne Gillian

Date: 06-05-06



7. Certifications and Approvals for Permits:

7.1 Certificate by Applicant(s)

I/We hereby certify that I/We have read and thoroughly understand the conditions and requirements of this Application, and am/are authorized to sign this application in accordance with the Rules and Regulations of the Illinois Pollution Control Board. I/We hereby agree to conform with the Standard Conditions and with any other Special Conditions made part of this Permit.

7.1.1 Name of Applicant for Permit to Construct: V3 Monee, LLC BY: V3 REALTY CO LLC
ITS MANAGER

Address: 7325 Janes Avenue

City: Woodridge

State: IL

Zip Code: 60517

Signature X Brian Blackmore

Date: 6-5-06

Printed Name: Brian Blackmore

Phone No: 630-724-1200

Title: VICE PRESIDENT

Organization: V3 REALTY CO LLC

7.1.2 Name of Applicant for Permit to Own and Operate: Village of Monee

Address: Village Hall, 5130 West Court Street

City: Monee

State: IL

Zip Code: 60449

Signature X Dave Else

Date: 6-13-06

Printed Name: Dave Else

Phone No: 708-534-4465

Title: DIR OF WATER

7.2 Attested (Required When Applicant is a Unit of Government)

Signature X Kathleen M. Burkman Date: 6-13-06
Title: Village Clerk
(City Clerk, Village Clerk, Sanitary District Clerk, Etc.)

7.3 Applications from non-governmental applicants which are not signed by the owner, must be signed by a principal executive officer of at least the level of vice president, or a duly authorized representative.

7.4 Certificate By Intermediate Sewer Owner

I hereby certify that (Please check one):

- ☒ 1. The sewers to which this project will be tributary have adequate reserve capacity to transport the wastewater that will be added by this project without causing a violation of the environmental Protection Act or Subtitle C, Chapter I, or
- ☐ 2. The Illinois Pollution Control Board, in PCB _____ dated _____ granted a variance from Subtitle C, Chapter I to allow construction of facilities that are the subject of this application.

Name and location of sewer system to which this project will be tributary:

Will Center Rd. sewer at the intersection of Court St.

Sewer System Owner: Village of Monee

Address: 5130 West Court Street

City: Monee State: IL Zip Code: 60449

Signature X Dave Else Date: 6-13-06

Printed Name: Dave Else Phone No: 708-534-4465

Title: DIR OF WATER

7.4.1 Additional Certificate By Intermediate Sewer Owner

I hereby certify that (Please check one):

- ☒ 1. The sewers to which this project will be tributary have adequate reserve capacity to transport the wastewater that will be added by this project without causing a violation of the environmental Protection Act or Subtitle C, Chapter I, or
- ☐ 2. The Illinois Pollution Control Board, in PCB _____ dated _____ granted a variance from Subtitle C, Chapter I to allow construction facilities that are the subject of this application.
- ☐ 3. Not applicable

Name and location of sewer system to which this project will be tributary:

Will Center Rd. sewer north of the intersection of Lilac Ave.

Sewer System Owner: Aqua Illinois, Inc.

Address: 1000 South Schuyler Ave.

City: Kankakee State: IL Zip Code: 60901

Signature X _____ Date: _____

Printed Name: _____ Phone No: _____

Title: _____

7.5 Certificate By Waste Treatment Works Owner

I hereby certify that (Please check one):

- ☒ 1. The waste treatment plant to which this project will be tributary has adequate reserve capacity to treat the wastewater that will be added by this project without causing a violation of the Environmental Protection Act or Subtitle C, Chapter I, or
- ☐ 2. The Illinois Pollution Control Board, in PCB _____ dated _____ granted a variance from Subtitle C, Chapter I to allow construction and operation of the facilities that are the subject of this application.
- ☐ 3. Not applicable

I also certify that, if applicable, the industrial waste discharges described in the application are capable of being treated by the treatment works.

Name of Waste Treatment Works: Aqua Illinois University Park

Waste Treatment Works Owner: Aqua Illinois, Inc.

Address: 1000 South Schuyler Ave.

City: Kankakee State: IL Zip Code: 60901

Signature X _____ Date: _____

Printed Name: _____ Phone No: _____

Title: _____

Please return completed form to the following address:

Illinois Environmental Protection Agency
Permit Section, Division of Water Pollution Control
P.O. Box 19276
Springfield, Illinois 62794-9276

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Log # _____

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
PERMIT SECTION
Springfield, Illinois 62794-9276

SCHEDULE A/B

APPLICATION FOR SANITARY SEWER: (please check one or both boxes as applicable)

Service Connection - Schedule A ☐

Publicly Owned or Regulated Extensions - Schedule B ☒

1. NAME OF PROJECT: Ironhorse
2. TYPE OF SERVICE(S): Residential ☒ ; Commercial ☒ ; Light Industrial (Domestic Waste Only) ☐ ;
Manufacturing ☐ ; Recreational ☐ ; Other ☒ (check all that apply) SEWER EXTENSION FOR FUTURE DEVELOPMENT
3. NATURE OF PROJECT: Project consists of: a sewer extension ☒ ; a sewer connection ☐ ;
a trunk sewer ☐ ; a replacement sewer ☐ ; a relief sewer ☐ ; an interceptor sewer ☐ ;
a new sanitary sewer ☒ . (check all that apply)
4. PROJECT LOCATION, SERVICE AREA AND POPULATION: Submit map(s) of the service area that includes the following:
 - 4.1 An 8½ X 11 inch detailed project location map or USGS map showing the project with respect to major roadways. In lieu of this map, a letter from the Illinois Historic Preservation Agency indicating compliance with the Illinois Historic Preservation Act for this project may be submitted.
 - 4.2 The proposed sewer layout and project location.
Township 34N Section 22 Range 13E
 - 4.3 Residential and/or non-residential areas and their associated waste loads to be immediately served by the sewers of this project.
 - 4.4 Potential residential and/or non-residential areas and their associated loads must be included in the overall design of the sewers of this project.
5. FACILITIES PLANNING AREA: This project is ☒ Is not ☐ being constructed entirely within the Facilities Planning Area (FPA) boundaries. Name of FPA: Deer Creek S.D.
6. TYPE OF DEVELOPMENT: The following design criteria should be used in estimating the population equivalent (P.E.) of a residential building:

Efficiency or Studio Apartment	= 1	P.E.
1 Bedroom Apartment	= 1.5	P.E.
2 Bedroom Apartment	= 3	P.E.
3 Bedroom Apartment	= 3	P.E.
Single Family Home	= 3.5	P.E.
Mobile Home	= 2.25	P.E.

Commonly used quantities of sewage flows from miscellaneous type facilities are listed in Appendix B, Table No. 2 of the Illinois Recommended Standards for Sewage Works.

- 6.1 RESIDENTIAL BUILDINGS: Number of building(s) _____ ;
Number of single family dwelling building(s) _____ ; Number of multiple dwelling buildings* _____ ;
Estimated total population equivalent 2205 P.E. * FUTURE, SEE ATTACHED DETAIL
* Please provide an itemized list for each multiple dwelling building including: Number of 1, 2 and 3 bedroom units; the total P.E. for the each building and the total P.E. for multiple family dwellings.

6.2 **NON-RESIDENTIAL BUILDINGS:** Describe use of building(s)

Commercial areas within the service area.

Principal product(s) or activities

Retail

Number of non-residential building(s) to be served under this Permit _____

Non domestic liquid waste is ☐ (see section 6.5) is not ☒ produced inside the building(s). If liquid wastes other than domestic are produced, submit Schedule N.

Estimated number of employees _____; Estimated number of occupants (transients) _____.

Estimated population equivalent (one population equivalent is 100 gallons of sewage per day, containing 0.17 pounds of BOD₅ and 0.20 pounds of suspended solids).

Flow P.E. 287; BOD P.E. 287; Suspended Solids P.E. 287

6.3 Total loading for project (Sum of 6.1 and 6.2) Design Average Flow 249,200 GPD; Design Max.

Flow 874,589 GPD; P.E. 287 BOD; P.E. 287 Suspended Solids

6.4 Commencing July 1, 2003, Section 12.2 of the Environmental Protection Act (415 ILCS 5/12.2, as amended by P.A. 93-32) requires the Agency to collect a fee for certain applications for the installation of sanitary sewer connections and extension. Except for the conditions listed below, the following fee schedule shall apply:

Fee Dollars	Population Equivalents
100	1
400	2 - 20
800	21 - 100
1200	101 - 499
2400	500 or more

Please send the appropriate fee based upon section 6.4 or 6.5; certified or cashiers check made out to: "Treasurer, State of Illinois, Environmental Protection Permit and Inspection Fund" with the applicant's Federal Employee Identification Number (FEIN) appearing on the face of the check and submit along with this schedule. Any fee remitted to the Agency shall not be refunded at any time or for any reason, either in whole or in part.

The Sewer Permit fee does not apply to:

- a) Any Department, Agency or Unit of State Government
- b) Any unit of local government where all of the following conditions are met;
 - 1) The cost of the installation or extension is paid wholly from monies of the unit of local government, state grants or loans, federal grants or loans, or any combination thereof;
 - 2) The unit of local government is NOT given monies, reimbursed or paid, either in whole or in part, by another person (except for State grants or loans or federal grants or loans;
- c) 1) Include a certified copy of the budget item or the board or council minutes which authorize the construction of this project with only local funds; and
 - 2) I/we

(Signature for Unit of Government)

hereby certify that subsections (b)(1), (b)(2) and (c)(1) have been met.

6.5 A \$1,000 fee shall be required for any industrial wastewater source that does not require pretreatment of the wastewater prior to discharge to the publicly owned treatment works or publicly regulated treatment works.

7. **DEVIATION FROM DESIGN CRITERIA:** The design criteria for sewers are contained in the "Illinois Recommended Standards for Sewage Works", Current Edition. This submittal does ☐ does not ☒ include deviations from said criteria. If deviations are included, justification for said deviations must be attached.

8. **INFILTRATION/EXFILTRATION LIMITS:** 200 gallons per inch diameter of sewer pipe per mile per day.

9. **SUMMARY OF SEWERS:**

Submit plan and profile drawings for all sanitary sewer extensions and for all sanitary sewer connections where either the domestic wastewater source serves more than one building, where the domestic wastewater source is 15 P.E. or more, where non-domestic waste is produced or where the connection is not direct to either a publicly-owned or publicly-regulated sewer.

	Service Connections		Publicly Owned or Regulated Extensions			
Pipe size – inches			FORCE MAIN 8	12	12	8
Total Length – feet			2800	1078	20	20
Min. slope used - %			0	0.22	.22	.45
Max. slope used - %			2	0.22	.22	.45
Min. cover over sewers - feet			5	6	6	6
Pipe Material & Specs.			PVC C900 ANSI C150	PVC SDR 35	PVC SDR 26	PVC SDR 26
Joint Material & Specs.			ASTM D3139	ASTM D3212	ASTM D3212	ASTM D3212
Total Manholes			2	4	0	0
Max. Distance Between Manholes			1500	400	0	0
Bedding Class for Rigid Pipe (A, B, or C per ASTM C12)			N/A	N/A	N/A	N/A
Bedding Class for Flexible Pipe (IA, IB, II, or III per ASTM 2321-89)			Class II	Class II	Class II	Class II

- 9.1 Is the project located in a flood plain? YES ☐ NO ☒ If yes, contact the Illinois Department of Natural Resources, Division of Water Resources Management for further permit requirements.

- 9.2 Water tight manhole covers used on all manholes where the manhole tops are below cover or where the tops may be flooded by surface runoff or high water? YES ☒ NO ☐

10. **EROSION CONTROL:** The design criteria for Erosion Control are contained in the "Illinois Urban Manual" Current Edition, distributed by the National Resource Conservation Service. This submittal does ☐ does not ☒ include deviation from said criteria. If deviations are included, justification for said criteria must be attached. (See Instructions for Schedule P to determine if Schedule P must be submitted.)

11. EXISTING SEWER SYSTEM:

A. This project will connect to one of the following:

- | | |
|--|--|
| 1. existing sanitary sewer <input checked="" type="checkbox"/> | 4. permitted combined sewer <input type="checkbox"/> |
| 2. existing combined sewer <input type="checkbox"/> | 5. proposed sanitary sewer <input type="checkbox"/> |
| 3. permitted sanitary sewer <input type="checkbox"/> | 6. proposed combined sewer <input type="checkbox"/> |

If permitted but not constructed and operational provide permit number _____

B. Size and location of downstream sewer(s):

15" at the intersection of Will Center Rd. and Crete-Monee Rd

12. **WATER SUPPLY PROTECTION:** The horizontal and/or vertical separation between sanitary sewers and watermain(s) is in accordance with Section 370.350 of the Illinois Recommended Standards for Sewage Works. YES ☒ NO ☐

The location of proposed and existing watermain(s) must be shown in both the plan and profile views on plan sheet(s) for each water-sewer line crossing and at all locations within 10 feet horizontal distance of the proposed sewer line. Detailed drawing(s) for crossings, either typical or site-specific, shall be shown on the plan sheet(s).

12.1 **HORIZONTAL SEPARATION:** All sewer line(s) is(are) 10 feet from water line(s) YES ☒ NO ☐

If no, provide justification AND describe the precautionary features against contamination

All proposed forcemain(s) 10 feet from water line(s) YES ☒ NO ☐ N/A ☐

12.2 **VERTICAL SEPARATION:**

- A. The water line(s) is(are) at least 18 inches above the sewer line(s) YES ☐ NO ☒ . If no, continue with 12.2.B and provide justification below as to why this is not possible and describe precautionary measures taken to prevent contamination.
- B. The water line(s) is(are) above the sewer line(s) but less than 18 inches YES ☐ NO ☒ . If no, continue with 12.2.C and provide justification below as to why this is not possible and describe precautionary measures taken to prevent contamination.
- C. The water line(s) is(are) at least 18 inches below the sewer line(s) YES ☒ NO ☐ . If no, provide justification below as to why this is not possible and describe precautionary measures taken to prevent contamination.

Justification and precautionary measures:

There is only one crossing where the watermain crosses below the sewer line. In this location the sanitary sewer will be of watermain quality.

12.3 Proximity to wells, reservoirs, and other potable water sources: YES ☐ N/A ☒

If Yes, Minimum distance _____ feet. Describe precautionary measures taken to avoid contamination:

Location of all potable water sources shown on plan sheets. YES ☐ NO ☐ NO KNOWN SOURCES ☒

13. PIPE AND MANHOLE TESTING:

- | | | |
|--|---|--|
| Is infiltration testing included in plans, specifications, or special provisions? | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| Is exfiltration test included in plans, specifications, or special provisions? | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| Is air testing included in plans, specifications, or special provisions? | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| Leakage testing for manholes included in plans, specifications, or special provisions? | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |

14. FLEXIBLE PIPE TESTING:

Is deflection test included in plans, specifications, or special provisions in accordance with the Illinois Recommended Standards for Sewage Works, Current Edition? YES ☒ NO ☐ N/A ☐

15. MISCELLANEOUS REQUIREMENTS:

The following requirements should be included on the plan sheets where so indicated. For items where this is not specified, the requirements may be on the plan sheets, in the specifications, or in the special provisions:

- 15.1 Standard Specifications for Water and Sewer Main Construction in Illinois, Current Edition, govern the construction of this project. YES ☒ NO ☐ . If no, please provide specifications.
- 15.2 Pipe and joint ASTM/AWWA designation included on plan sheets. YES ☒ NO ☐
- 15.3 All flexible gravity sewer pipe installed in accordance with ASTM D2321-89; embedment materials for bedding, haunching, and initial backfill to at least 6 inches over the top of the pipe with Class 1A or 1B or II or III; processed material produced for highway construction used in the project classified according to particle size, shape, and gradation in accordance with ASTM D2321-89, Section 9 and Table 1. YES ☒ NO ☐ N/A ☐
- 15.4 All rigid gravity sewer pipe installed in accordance with ASTM C12 and bedding material Class A, B, or C. YES ☐ NO ☐ N/A ☒
- 15.5 Pickholes in all manholes likely to be flooded not larger than 1 inch in diameter and of the concealed type. YES ☒ NO ☐ N/A ☐
- 15.6 All manholes numbered. YES ☒ NO ☐ N/A ☐
- 15.7 Match lines shown on all plan sheets. YES ☒ NO ☐ N/A ☐

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency
Division of Water Pollution Control, Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

Schedule F - Sewer System Lift Station / Force Main

1. Name of Project: Ironhorse
2. Design Population:
Area to be served 200+/- acres. Population to be served 2492 P.E..
3. Design Flows:
Design Average Flow 173 gpm. Design Maximum Flow 607 gpm.
4. Lift Station will serve:
☐ Only separate sewers ☐ Only combined sewers ☐ Separate and combined sewers
☒ Domestic waste sewers ☐ Industrial waste sewers ☐ Domestic and industrial waste sewers
5. Lift Station is designed to serve:
☒ Only the population indicated above ☐ An anticipated additional waste contribution of _____ P.E.
6. Force Main:
Size of Force Main (inches) 8" Total Length (feet) 2800'
Pipe material specifications PVC C900 Joint specifications ASTM D3138
Are air relief valves provided at high points? ☒ Yes ☐ No
Are clean-outs (blow-offs) provided at low points? ☒ Yes ☐ No
7. Design Head (Total Dynamic Head):
A) Static Head: Discharge Elevation: 777.76
Low Water Elevation: 738.99
Static Head 38.77 Feet
B) Pipe friction loss: 24.00 Feet at "C" = 130
C) Minor Losses (Valves, etc.) 5.7 Feet at "C" = 100
Total Dynamic Head (A + B + C) 68.47 Feet
Maximum Suction Lift (if applicable) N/A Feet

8. Pumps

Number of Pumps	Type of Pump	GPM per Pump	at TDH (Feet)	H.P. of Each Pump	Pass 3" Spheres
2	Flygt NP 3153 Submersible Solids Handling	650	72.6	20	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Pumps				<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No

- a. Rated Capacity of Lift Station 650 gpm at 72.6 feet of TDH.
- b. Pumping Capacity with Largest Unit Out of Service 650 gpm at 72.6 feet of TDH.
- c. Are all pumps with positive suction head and/or self priming? ☒ Yes ☐ No
- d. Have provisions been made to detect shaft seal failure or potential shaft seal failure? ☒ Yes ☐ No

Schedule F - Sewer System Lift Station / Force Main
Page 2

9. Valves

- a. Discharge Pipe ☐ Gate ☒ Check ☒ Other Eccentric Plug Valve
b. Suction Line (if applicable) ☐ Gate ☐ Check ☐ Other _____

10. Wet Well

- a. Effective capacity (volume between pumps off and pumps on switches) = 1,102.4 gallons
b. Detention time at design flow = 30 minutes
c. Are there provisions for pump removal? ☒ Yes ☐ No

11. Buoyancy Calculations

- a. Have buoyancy calculations been submitted? ☒ Yes ☐ No ☐ N/A
b. Depth of groundwater table: 10 feet below the ground surface.

12. Accessibility

- a. Is the pump station accessible by an all weather road? ☒ Yes ☐ No

13. Ventilation

- a. Wet Well:
Continuous with at least 12 complete air changes per hour? ☐ Yes ☒ No
Intermittent with at least 30 complete air changes per hour? ☐ Yes ☒ No
b. Dry Well (if applicable):
Continuous with at least 6 complete air changes per hour? ☐ Yes ☐ No ☒ N/A
Intermittent with at least 30 complete air changes per hour? ☐ Yes ☐ No ☒ N/A
c. Is portable ventilation equipment available for use at all times? ☐ Yes ☐ No

14. Emergency Operations

- a. In case of power failure, is an alternate power supply available? ☒ Yes ☐ No
If yes, please describe the source: Permanent Generator
b. Is a portable pump, with adequate pumping capacity, available for use at all times? ☐ Yes ☐ No
c. Has a riser from the force main been provided to hook-up portable pumps? ☒ Yes ☐ No
d. Length of time between a power failure and commencement of pumping by emergency equipment Instantaneous
e. Estimated time interval before damage or sewer backup will occur _____
f. Type of alarm system proposed: ☒ Telemetering System ☒ Audio-Visual with self contained power
g. Are personnel available at all times to operate emergency equipment? ☐ Yes ☐ No

15. Flow Measurement

- a. Type of flow measurement provided: ☐ Flow meter ☒ Elapsed time meters ☐ ITR

16. Compliance with Illinois Recommended Standards for Sewage Works

- a. Can the pump station remain operational during the 25 year flood? ☒ Yes ☐ No
b. Is the pump station protected from physical damage during the 100 year flood? ☒ Yes ☐ No
c. When applicable, will electrical systems and components comply with NEC requirements for Class I, Group D, Division I locations? ☒ Yes ☐ No
d. Have provisions been made to automatically alternate the pumps? ☒ Yes ☐ No
e. Is the motor control center located outside and protected by a conduit seal? ☒ Yes ☐ No
f. Can the motor be electronically disconnected without disturbing the seal? ☒ Yes ☐ No

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 1112, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Farm Management Center

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that section. Failure to do so may prevent this form from being processed and could result in your application being denied.

For IEPA Use:

LOG #

DATE RECEIVED:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
PERMIT SECTION
Springfield, Illinois 62794-9276

Schedule P - Erosion Control

1. Name of Project Ironhorse
2. Total area disturbed by excavation: 2 +/-
3. Summary of erosion control practices:

			Area Controlled (Sq. Ft.)	Permanent (P) or Temporary (T)
Vegetative Control	<u>87120</u>	(Sq. Feet)	<u>87120</u>	<u>P</u>
Interceptor Ditches		(Feet)		
Berms		(Feet)		
Sediment Basins		(Cu. Yd.)		
Debris Basins		(Cu. Ft.)		
Desilting Basins		(Cu. Ft.)		
Silt Traps		(Cu. Ft.)		
Mulching and Matting		(Cu. Ft./Sq. Ft.)		
Other	<u>Silt Fence</u>	(Indicate)	<u>9000</u>	<u>T</u>

4. Attach topographical or plan maps of construction area and indicate erosion control practices.
5. Drainage area (above and including construction site) _____
6. Slope categories of construction site:

	Area (acres)	Disposition of collected sediment
6.1 0 - 2% slope		
6.2 2 - 4% slope		
6.3 4 - 6% slope		
6.4 6% slope or greater	<u>2 +/-</u>	<u>Collected sediment placed onsite.</u>

Please check one below.

☒ Erosion control practices identified above will be constructed in accordance with Illinois Urban Manual, 1995.

OR

☐ Plans or specifications for the above referenced erosion control practices are attached.

COMMERCIAL

$$28.7 \text{ AC} \times 10 \text{ PE/AC} = 287 \text{ PE}$$

RESIDENTIAL

$$462 \text{ UNITS} \times 3.5 \text{ PE/UNIT} = 1617 \text{ PE}$$

OFFSITE

588 PE

$$\text{TOTAL PE} = 2492$$

100 GAL/PE/DAY

$$\text{DESIGN AVERAGE FLOW} = 2492 \text{ PE} \times 100 \text{ GAL/PE/DAY} = 249,200 \text{ GPD}$$

$$\text{PEAK DAY FACTOR} = \frac{18 + \sqrt{\frac{2492}{1000}}}{4 + \sqrt{\frac{2492}{1000}}} = 3.51$$

$$\text{DESIGN MAX FLOW} = 874,589 \text{ GPD}$$

COMPUTED:

RMW

DATE:

5-17-06

CHECKED:

DATE:



ENGINEERING CALCULATIONS

PROJECT:

IRONHORSE

SUBJECT:

PE BREAKDOWN

SHEET NO:



Project Name: Ironhorse

Wet Well Buoyancy Calculations

A. General Information	Units
Specific Weight of Water	62.4 lbs/c.ft.
Specific Weight of Concrete	150 lbs/c.ft.
Specific Weight of Soil	110 lbs/c.ft.
Water Table Elevation for Analysis	767.8 Feet

B. Flat Top Information	
Top of Structure/Flat Top Elevation	777.80 Feet
Diameter of Flat Top	6.00 Feet
Radius of Flat Top	3.00 Feet
Thickness of Top Slab	13 Inches
	1.08 Feet
Void Area in Top Slab for Hatches, etc.	18.50 Sq.Ft.
Total Volume of Concrete in Flat Top	11 C.Ft.
Weight of Flat Top	1,588 Lbs.

C. Barrel Section Information	
Top of Barrel Section Elevation	776.72 Feet
Invert of Wet Well	736.99 Feet
Wet Well Inner Diameter	6 Feet
Wet Well Inner Radius	3 Feet
Wet Well Wall Thickness	7 Inches
	0.58 Feet
Wet Well Outer Diameter	7.17 Feet
Wet Well Outer Radius	3.58 Feet
Total Volume of Concrete in Barrel Sections	455 C.Ft.
Weight of Barrel Sections	68,274 Lbs.

D. Base Information	
Concrete Base Diameter	8.5 Feet
Concrete Base Radius	4.25 Feet
Concrete Base Thickness	3 Feet
Total Volume of Concrete in Base	57 C.Ft.
Weight of Concrete Base	8,512 Lbs.

SUMMARY OF FORCES	
Weight of Structure (Down)	78,374 Lbs.
Buoyant Forces (Upward)	76,060 Lbs.
Resultant	2,314 Lbs.

Water Table Elevation is based on TSC Report.

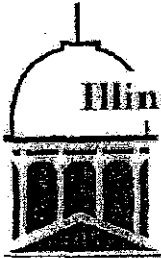
Boring B-1 revealed water at 10' at the end of the boring.

No 24 hour water table elevation was given. The date of the boring was 8-21-04.

Total Volume of Water Displaced by Wet Well	1,162 C.Ft.
Buoyant Force from Wet Well	72,519 Lbs.

Total Volume of Water Displaced by Base	57 C.Ft.
Buoyant Force from Base	3,541 Lbs.

04080 / Permit / Review



Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • Teletypewriter Only (217) 524-7128

Voice (217) 782-4836

Will County

PLEASE REFER TO: IHPA LOG #010111704

Monee

11WI3105, 11WI3106, 11WI3107, 11WI3108, 11WI3109, 11WI3110,
Section 22, T34N/R13E

COEC

New Construction; 130-Acre South Parcel

January 3, 2005

Nathan Groff
V3 Consultants
7125 Janes Avenue
Suite 100
Woodridge, IL 60517

Dear Mr. Groff:

Acre(s): 139 Site(s): 6
Archaeological Contractor: AGS/Balek

Thank you for submitting the results of the archaeological reconnaissance. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

Our staff has reviewed the archaeological Phase I reconnaissance report performed for the project referenced above. The Phase I survey and assessment of the archaeological resources appear to be adequate. Accordingly, we have determined, based upon this report, that no significant historic, architectural, and archaeological resources are located in the project area.

Please submit a copy of this letter with your application to the state or federal agency from which you obtain any permit, license, grant, or other assistance. Please retain this letter in your files as evidence of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

AEH:DJH

cc: Cynthia L. Balek, Ph.D., Archaeology and Geomorphology Services



Illinois Historic
Preservation Agency

04/21

09/16/04

Monroe

1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • Teletypewriter Only (217) 524-7128

Will County

PLEASE REFER TO: IHPA LOG #038081604

Monroe

N. of W. Crete Rd., S. of Dralle Rd., E. of IL Route 50, & W. of S. Highland Ave., Monroe.

COEC, V3C-04121.

New Construction; 74 Acre North Parcel

September 13, 2004

Biswajit Dhar

V3 Consultants

7325 James Ave., Suite 100

Woodridge, IL 60517

Dear Mr. Dhar:

The Illinois Historic Preservation Agency is required by the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420, as amended, 17 IAC 4180) to review all state undertakings for their effect on cultural resources. Pursuant to this requirement, we have received information regarding the above referenced project for our comment. Based on the information provided, we understand that no state agency funds will be expended for this proposed project, therefore this project has been classified as a private undertaking Subject to Section 6 of this Act. If state agency funds will be used, please notify us immediately.

According to the information provided concerning the proposed project, apparently there is no federal involvement in your project. However, please note that the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency, then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case.

Our files do not identify any previously recorded historic properties within this proposed project area, nor is the project area within the high probability area for archaeological resources as defined in the state Act. Accordingly, this project is EXEMPT pursuant to the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/6). An archaeological survey for your above referenced project is not required under STATE law.

Sincerely,

Anne E. Haaker

Anne E. Haaker

Deputy State Historic
Preservation Officer

AER

CC: